

Remarks

Reconsideration of this Application is respectfully requested.

Upon entry of the foregoing amendments, claims 32 and 34-53 are pending in the application, with claims 32, 34, 40, 43, and 51 being the independent claims. Claims 18-31 and 33 are sought to be canceled without prejudice to or disclaimer of the subject matter therein. Claims 1-17 were previously canceled. Claim 32 is sought to be amended merely to correct typographical errors and is not intended to change the scope of the claim. Claims 34-53 are sought to be added. These changes are believed to introduce no new matter, and their entry is respectfully requested.

Based on the above amendment and the following remarks, Applicant respectfully requests that the Examiner reconsider all outstanding objections and rejections and that they be withdrawn.

Allowed Claim

Applicant acknowledges with gratitude the Examiner's allowance of claim 32.

Objections to the Specification

In section 2 of the Office Action, the Examiner objected to the specification because it allegedly introduces new matter into the disclosure. Accordingly, Applicant has amended the specification to remove the alleged new matter.

Rejections under 35 U.S.C. § 112

Claims 18-31 and 33

In section 3 of the Office Action, claims 18-31 and 33 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. However, claims 18-31 and 33 have been cancelled, rendering the 112 rejection moot. Applicant therefore respectfully requests reconsideration and withdrawal of the rejection of claims 18-31 and 33.

Rejections under 35 U.S.C. § 102

Claims 18-26 and 29-30

In section 4 of the Office Action, claims 18-26 and 29-30 were rejected under 35 U.S.C. § 102(e) as allegedly being anticipated by U.S. Patent No. 6,236,678 to Horton, Jr. *et al.* (hereinafter "Horton"). However, claims 18-26 and 29-30 have been cancelled, rendering the 102 rejection moot. Nevertheless, the 102 rejection will be discussed with respect to new claims 34-53.

Horton describes a method and apparatus for converting between byte lengths and burdened burst lengths in a high speed cable modem. Each time a new burst profile is received at the cable modem, a set of physical data length values corresponding to respective transmission data byte length values is calculated from the parameters of the received burst profile and stored in memory.

Independent claim 34 recites, among other features, "transmitting either the long packets via the first carrier using the wide-band ranging data or the short packets via the second carrier using the narrow-band ranging data." Applicant asserts that independent

claim 34 is patentable over Horton for at least the reason that Horton does not teach or suggest this feature.

Furthermore, Applicant asserts that claims 35-39, which depend from independent claim 34, are patentable over Horton for at least reasons similar to those set forth above with respect to independent claim 34, and further in view of their own respective features.

Independent claim 40 recites, among other features, "transmitting a data packet having a data packet length either via the first carrier frequency using the at least one first user unique parameter or via the second carrier frequency using the at least one second user unique parameter, based on the data packet length." Applicant asserts that independent claim 40 is patentable over Horton for at least the reason that Horton does not teach or suggest this feature.

Furthermore, Applicant asserts that claims 41 and 42, which depend from independent claim 40, are patentable over Horton for at least reasons similar to those set forth above with respect to independent claim 40, and further in view of their own respective features.

Independent claim 43 recites:

In a communication system, a method comprising:

allocating a wide-band channel for transmission of relatively long packets;

allocating a narrow-band channel for transmission of relatively short packets; and

transmitting a data packet having a data packet length using either the wide-band channel or the narrow-band channel based on the data packet length.

Applicant asserts that Horton does not teach or suggest each and every feature of Applicant's claim 43.

Furthermore, Applicant asserts that claims 44-50, which depend from independent claim 43, are patentable over Horton for at least reasons similar to those set forth above with respect to independent claim 43, and further in view of their own respective features.

Independent claim 51 recites:

In a communication system, a method comprising:
 allocating a first carrier frequency for communication of comparatively short packets using a comparatively low symbol rate;
 allocating a second carrier frequency that is different from the first carrier frequency for communication of comparatively long packets using a comparatively high symbol rate; and
 transmitting a data packet having a data packet length using either the first carrier frequency or the second carrier frequency based on the data packet length.

Applicant asserts that Horton does not teach or suggest each and every feature of Applicant's claim 51.

Furthermore, Applicant asserts that claims 52 and 53, which depend from independent claim 51, are patentable over Horton for at least reasons similar to those set forth above with respect to independent claim 51, and further in view of their own respective features.

Applicant therefore respectfully requests that claims 34-53 be passed to allowance.


Conclusion

All of the stated grounds of objection and rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider all presently outstanding objections and rejections and that they be withdrawn. Applicant believes that a full and complete reply has been made to the outstanding Office Action and, as such, the present application is in condition for allowance. If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at the number provided.

Prompt and favorable consideration of this Amendment is respectfully requested.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.



Bryan S. Wade
Attorney for Applicant
Registration No. 58,228

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1100 New York Avenue, N.W.
Washington, D.C. 20005-3934
(202) 371-2600

570362v1